

# A Study of Clinical Profile of Dengue Fever in Punjab, North India

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**Background:** Dengue fever is the world's most important viral hemorrhagic fever. Indian data are scarce on the clinical presentation of dengue fever. Data on the relationship of bleeding with thrombocytopenia are conflicting.

**Methods:** The medical records of 260 patients having positive dengue serology, admitted during an outbreak of dengue fever in 2006, were analyzed. The patients were categorized according to WHO criteria.

**Results:** Out of the 260 cases, 220 (84.6%) were classified as dengue fever, 35 (13.5%) as dengue hemorrhagic fever and 5 (1.92%) as dengue shock syndrome. The mean age was 31.08 years and maximum number of patients (33.46%) belonged to the age group of 20-29 yrs. The M: F ratio was 3.4:1. Fever (100%), hemorrhagic manifestations (36.15%), vomiting (35.38%) and abdominal pain (20.38%) were the most common presenting symptoms. Gastrointestinal tract was the most common site of hemorrhage (54.25%), followed by skin rash (27.65%), gum bleed (20.2%) and epistaxis (10.6%). The mean hemoglobin and platelet count were 13.91 gm% and  $48.27 \times 1000/\text{cumm}$  respectively. Hemorrhagic manifestations were noted in 45.7% (16/35) patients with platelet count  $<20,000/\text{cumm}$ , 34.6% (44/127) patients with platelet count between 20,000–50,000/cumm, and 34.7% (34/98) patients with platelet count  $>50,000/\text{cumm}$ . Out of the patients who received platelet transfusions, 60 (49.58%) were bleeders and 61 (50.41%) were non bleeders.

**Conclusions:** Our data showed that there is no correlation between the occurrence of hemorrhagic manifestations and the degree of thrombocytopenia. Other notable features of this study were a high male: female ratio, predominant gastrointestinal symptoms, higher incidence of hemorrhagic manifestations, and inappropriate platelet transfusions. Preventive programs for dengue fever need to be more vigilant, and platelet transfusions need to be appropriate to decrease the treatment costs.

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## Prevalence and Factors Associated with Rotavirus Infection Among Children Admitted with Acute Diarrhoea in Mulago Hospital

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**Background:** Rotavirus remains the most common cause of severe dehydrating diarrhoea among children worldwide. By five years of age almost all children will have had an episode of rotavirus gastroenteritis. Children in developing countries die more because of several factors including poorer access to hydration therapy and greater prevalence of malnutrition. The magnitude of rotavirus disease in Uganda is not known.

admitted with acute diarrhoea to Acute Care Unit (ACU) of Mulago Hospital.

**Methods:** Three hundred ninety children, aged between 3–59 months with acute diarrhoea were recruited consecutively after consent by the caretakers. Records of clinical history, sociodemographic characteristics, physical examination and laboratory investigations were recorded on a precoded questionnaire. Stool samples were tested for presence of rotavirus antigens using the EIA kit (DAKO IDELA rotavirus EIA detection kit).

**Study Results:** The prevalence of rotavirus infection was 45.4%. On multivariate analysis rotavirus was significantly associated with a higher education (above secondary) level of the caretaker ( $P=0.003$ ), more than 4 people in the house ( $P=0.025$ ) and breastfeeding ( $P=0.017$ ). Age was significantly associated with rotavirus on bivariate analysis but this association disappeared on multivariate analysis. No significant association was found between rotavirus infection and nutritional status, HIV status and attendance of day care or school.

**Conclusion and recommendations:** Rotavirus infection is highly prevalent among children with acute diarrhoea admitted to ACU Mulago Hospital. A rotavirus vaccine is therefore recommended and a community based study to identify the type of rotavirus strains circulating in Uganda is needed so that an appropriate vaccine can be used if a decision to give the vaccine is made.

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## Influenza Outbreak in National Service Training Camps in Perlis, Malaysia

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**Background:** In April 2007, we received notifications of increasing numbers of upper respiratory tract infections (URTI) among National Service trainee in two camps in Perlis. Preliminary investigation suspects an outbreak of influenza-like-illness.

**Methods:** A retrospective review of the cases records was done for those who had been diagnosed as URTI prior to notifications in order to come out with a working case definition. Then, active case finding was carried out in order to document the disease nature in terms of person, place and time. Epidemiologic data on clinical features and laboratory tests obtained by means of a retrospective review of the case records, interviews of the trainee and from prospectively recorded case notes. Environmental health assessment of the camp was done.

**Results:** There were 328 and 304 National Service trainees in both National Service Camp of Tasik Meranti and Timah Tassoh, respectively. The terminology used during the investigation of outbreak is viral fever for investigation. The case definition was a trainee with fever and cough with or without other upper respiratory tract symptoms. 102 trainees from Tasik Meranti Camp and 33 trainees from